Composite Video and Data

The OTS-1V1DTR provides for the digital transmission of 1 Channel of Composite Video and 1 Channel of Duplex Serial Data.

1 → Video

System Design

All units come in an insert card version. The cards can be inserted into our 16-slot, 19" rack-mountable card cage (OT-CC-16-100) or one of our smaller Optiva™ Desktop Card Racks (OT-DTCR Series).
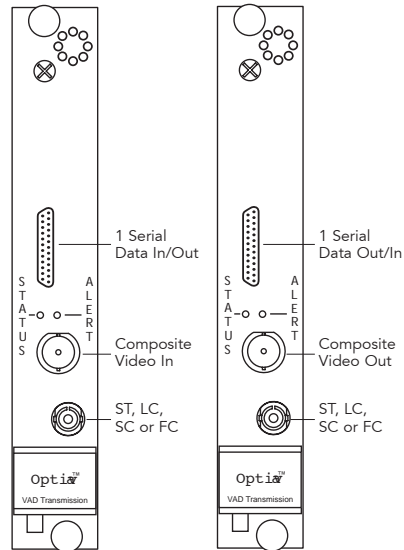
← **1** → Data

The Optiva™ Desktop Card Racks can handle one, two or four insert cards, creating compact, mountable, stand alone systems. The use of separate OT-DTCR enclosures allows for future flexibility and expansion as all cards are hot-swappable and can be used in any enclosure. Each one of our card housing units operate with an appropriate power supply. See "Accessories" for power supply specifications.
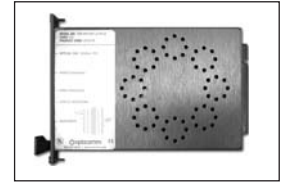
Optiva™ Upgrade Path

This system can be purchased without an optical port as an add-on to an existing Optiva™ system daisy-chain.
(See "Non-Optical Version" below).

The Optiva™ bandwidth requirement of this system is 360 Mbps.

1 Serial Data In/Out	1 Serial Data Out/In
Composite Video In	Composite Video Out
ST, LC, SC or FC	ST, LC, SC or FC

OTS-1VT1DTR   **OTS-1VR1DRT**

Each insert card comes with a label identifying the specific protocols handled, connector pin-out and other vital information.

For optimal bandwidth allocation, each insert card can daisy-chain with an additional card in the same chassis. **See "Optiva™ Upgrade Path".**

Features

- Composite Video and Serial Data over one fiber
- 10-Bit Digital Transmission
- TDM - Single fiber, dual wavelength
- Complies with SMPTE standards for Video transmission
- Compatible with MDM-7000 Series for WDM and CWDM multiplexing
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Ideal for Camera PTZ applications

Versions Available*

Wavelength (nm) & Fiber	Transmit/Receive**	Receive/Transmit**	Optical Connector	Optical Budget (dB)	Range*** (km)	Form Factor
1310/1550 Multimode	OTS-1VTDTR-A1/A3M-XX-IC	OTS-1VRDRT-A3M/A1-XX-IC	ST, FC, LC or SC	10	3	IC (1-slot)
1310/1550 Singlemode	OTS-1VTDTR-A2/A3-XX-IC	OTS-1VRDRT-A3/A2-XX-IC	ST, FC, LC or SC	12	20	IC (1-slot)
1310/1550 SM (D)	OTS-1VTDTR-A2/A3D-XX-IC	OTS-1VRDRT-A3D/A2-XX-IC	ST, FC, LC or SC	17	40	IC (1-slot)
1310/1550 SM (H)	OTS-1VTDTR-A2/A3H-XX-IC	OTS-1VRDRT-A3H/A2-XX-IC	ST, FC, LC or SC	25	60	IC (1-slot)
1270-1610 SM (CWDM)	OTS-1VTDTR-L4/L4-XX-IC	OTS-1VRDRT-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (1-slot)
Non-Optical Version	OTS-1VTDTR-NOC-IC	OTS-1VRDRT-NOC-IC	N/A	N/A	N/A	IC (1-slot)

Serial Data Codes - "D" indicates RS-232. For other Serial Data preferences, please use: "DJ" = RS-422; "DK" = RS-485 (2W); and "DW" = RS-485 (4W).

* Contact Opticomm for other versions available.
** XX indicates the type of optical connector. Each of ST, FC, LC or SC are available.
*** Chromatic dispersion and additional losses should be taken into account.

Video

Standard	SMPTE 170M; RS-250C
Bit Resolution	10-Bit Processing; 10-Bit Transmission
Level	1.0 Volt p-p
Bandwidth	5.5 MHz
Differential Gain	< 1%
Differential Phase	< 0.7°
Compatibility	NTSC, PAL
Signal to Noise Ratio	> 67 dB
Connector	BNC (IEC 60169-8)

Data

Connector	Micro DB25
RS-232, RS-422	
Data Rate	DC to 1 Mbps
RS-485 (2 Wire)	
Data Rate	DC to 1 Mbps
RS-485 (4 Wire)	
Data Rate	DC to 1 Mbps
Contact Closure	

General

Dimensions & Weight	Insert Card (IC): 6.3" L x 0.8" W x 4.0" H 11 oz
Operating temperature	-20° C to +55° C
Storage temperature	-40° C to +85° C
Humidity	0 to 95% non-condensing
Operating voltage	9-12 V_{DC}
Consumption	1 Amp Max per Insert Card
System Latency	Less than 1ms

Local Monitoring	LED Status Indication
Remote Monitoring	Compatible with OptivaView™ SNMP Management Suite

Optiva™ Configurable Communication Platform

Network Management

SDI & HD-SDI

Composite Video, Audio & Data

RGB/VGA/DVI

Audio/FSK/Intercom

Data (Ethernet/Serial/USB)

CATV/RF & L-Band

Optical Switching, Routing & Redundancy

Passive Multiplexing Solutions

Enclosures, Racks & Frames

Power Supplies & Accessories

10 YEAR WARRANTY **ISO 9001:2000 CERTIFIED**

CSA® CE

FCC PART 15 COMPLIANT

MADE IN THE USA

Sample Configuration

Video → OTS-1VT1DTR — 1 Fiber — OTS-1VR1DRT → Video

Data ↔ OTS-1VT1DTR   OTS-1VR1DRT ↔ Data